

SEQUENCE LISTING

<110> JOUNG, KEITH J.
PABO, CARL

<120> CONTEXT SENSITIVE PARALLEL OPTIMIZATION OF ZINC FINGER
DNA BINDING DOMAINS

<130> 51588.62031 US

<140> 10/532,258

<141> 2005-04-21

<150> PCT/US03/034010

<151> 2003-10-23

<150> 60/420,485

<151> 2002-10-23

<150> 60/466,889

<151> 2003-04-30

<160> 53

<170> PatentIn Ver. 3.3

<210> 1

<211> 25

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peptide

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<221> MOD_RES

<222> (2)..(5)

<223> Variable amino acid and this region may encompass
2 to 4 residues

<220>

<221> MOD_RES

<222> (7)..(18)

<223> Variable amino acid

<220>

<221> MOD_RES

<222> (20)..(24)

<223> Variable amino acid and this region may encompass
3 to 5 residues

<400> 1

Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa His Xaa Xaa Xaa Xaa Xaa His

<210> 2
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peptide

<400> 2
Asp Arg Ser Ser Leu Thr Arg
1 5

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peptide

<400> 3
Gln Gly Gly Asn Leu Val Arg
1 5

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peptide

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Gln Ala Ala Thr Leu Gln Arg
1 5

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oligonucleotide

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<210> 6
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oligonucleotide

<400> 6
gaa 3

<210> 7
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oligonucleotide

<400> 7
gca 3

<210> 8
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peptide

<400> 8
Asp Arg Ser Ser Thr Arg Gln Gly Gly Asn Val Arg Gln Ala Ala Thr
1 5 10 15

Gln Arg

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oligonucleotide

<400> 9
gcagaagcc 9

<210> 10
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peptide

<400> 10
Arg Lys Asp Ser Val Arg Gln Ser Gly Asp Arg Arg Asp Cys Arg Asp
1 5 10 15

Ala Arg

<210> 11
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oligonucleotide

<400> 11
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9

<210> 12
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peptide

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Ala Ser Ala Asp Thr Arg Asn Arg Ser Asp Ser Arg Thr Ser Ser Asn
1 5 10 15

Lys Lys

<210> 13
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oligonucleotide

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gatgctgca	9
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ttttgacggt gcgtgggcgg ttcac	25
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<400> 18

Asp	Ser	Pro	Thr	Arg	Arg	Gln	Gly	Ala	Asn	Arg	Arg	Gln	Ala	Asn	Thr
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Gln Arg

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<400> 19

Asp	Ser	Pro	Thr	Arg	Arg	Gln	Asn	Thr	Asn	Thr	Arg	Gln	Ala	Asn	Thr
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Gln Arg

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<400> 20

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Gln Arg

<210> 21

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<400> 21

Asp Glu Ser Thr Arg Arg Gln Gly Pro Asn Arg Arg Gln Arg Asn Thr
1 5 10 15

Gln Arg

<210> 22

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peptide

<400> 22

Asp Ser Pro Thr Arg Arg Gln Gly Pro Asn Arg Arg Gln Gly Asn Thr
1 5 10 15

Thr Arg

<210> 23

<211> 18

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peptide

<400> 23

Asp Ser Pro Thr Arg Arg Gln Asn Pro Asn Val Arg Gln Arg Asn Thr
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Gln Arg

<210> 24

<211> 18

<212> PRT

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<223> Description of Artificial Sequence: Synthetic
peptide

<400> 24

Asp Ser Pro Thr Arg Arg Gln Arg Thr Asn Ile Arg Gln Arg Asn Thr
1 5 10 15

Gln Arg

<210> 25
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<220>
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peptide

<400> 25
Asp Arg Pro Thr Arg Arg Gln Gly Ala Asn Arg Arg Gln Ala Asn Thr
1 5 10 15

Gln Arg

<210> 26
<211> 18
<212> PRT
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<220>
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peptide

<400> 26
Asp Ser Pro Thr Arg Arg Gln Asn Thr Asn Asn Arg Gln Ala Asn Thr
1 5 10 15

Gln Arg

<210> 27
<211> 18
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peptide

<400> 27
Asp Ser Pro Thr Arg Arg Gln Lys Pro Asn Asp Arg Gln Gly Asn Ser
1 5 10 15

Ile Arg

<210> 28
<211> 18
<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 28

Asp	Ser	Pro	Thr	Arg	Arg	Gln	Ser	Thr	Asn	Asn	Arg	Gln	Gly	Asn	Ser
1				5				10						15	

Asn Arg

<210> 29

<211> 18

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<400> 29

Asp	Ser	Pro	Thr	Arg	Arg	Gln	Asn	Val	Asn	Thr	Arg	Gln	Arg	Asn	Thr
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Gln Arg

<210> 30

<211> 18

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<400> 30

Arg	Gln	Asp	Ile	Val	Lys	Gln	Ser	Ser	Thr	Thr	Arg	Glu	Lys	Gln	Gly
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His Arg

<210> 31

<211> 18

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<400> 31

Arg	Ser	Asp	Val	Ala	Asn	Gln	Ser	Ser	Thr	Thr	Arg	Glu	Arg	Gln	Gly
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Lys Arg

<210> 32

<211> 18

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<400> 32

Arg	Ser	Asp	Val	Ala	Asn	Gln	Ser	Ser	Thr	Thr	Arg	Glu	Arg	Gln	Gly
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Lys Arg

<210> 33

<211> 18

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<400> 33

Arg	Ser	Asp	Leu	Arg	Lys	Gln	Ser	Ser	Thr	Thr	Arg	Glu	Arg	Gln	Gly
1				5					10					15	

Lys Arg

<210> 34

<211> 18

<212> PRT

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<400> 34

Arg	Pro	Asp	Val	Asp	Lys	Gln	Ser	Ser	Thr	Thr	Arg	Asp	Ser	Thr	Thr
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Arg Arg

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peptide

<400> 35
Arg Ser Asp Val Ala Asn Gln Ser Ser Thr Thr Arg Glu Lys Gln Gly
1 5 10 15

Gly Arg

<210> 36
<211> 18
<212> PRT
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peptide

<400> 36
Arg Ser Asp Leu Thr Lys Gln Ser Gly Thr Lys Arg Glu Arg Gln Gly
1 5 10 15

Lys Arg

<210> 37
<211> 18
<212> PRT
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peptide

<400> 37
Arg Ser Asp Leu Thr Lys Gln Ser Ser Thr Thr Arg Glu Lys Gln Gly
1 5 10 15

Arg Arg

<210> 38
<211> 18
<212> PRT
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<400> 38

Arg Ser Asp Val Ser Lys Gln Ser Thr Thr Lys Arg Glu Arg Gln Gly
1 5 10 15

Lys Arg

<210> 39

<211> 18

<212> PRT

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<400> 39

Arg Gln Asp Ile Val Lys Gln Ser Ser Thr Thr Arg Glu Lys Gln Gly
1 5 10 15

His Arg

<210> 40

<211> 18

<212> PRT

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 40

Arg Ser Asp Leu Thr Lys Gln Ser Ser Thr Thr Arg Glu Arg Gln Gly
1 5 10 15

Lys Arg

<210> 41

<211> 18

<212> PRT

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Arg Pro Asp Val Gln Lys Gln Ser Gly Thr Val Arg Asp Gln Ser Asn
1 5 10 15

Arg Arg

<210> 42

<211> 18

<212> PRT

<213> Artificial Sequence

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peptide

<400> 42

Leu Arg Ala Asp Asp Asn Leu Ser Gln Thr Lys Arg Ile Arg Gly Asn
1 5 10 15

Val Arg

<210> 43

<211> 18

<212> PRT

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peptide

<400> 43

Ala Lys Ala Asp Asp Arg Leu Ser Gln Thr Lys Arg Val Lys Ser Asn
1 5 10 15

Arg Arg

<210> 44

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 44

Leu Arg Ala Asp Asp Arg Leu Ser Gln Thr Lys Arg Ile Gly Ser Asn
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Arg Arg

<210> 45
<211> 18
<212> PRT
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<220>
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peptide

<400> 45
Leu Arg Ala Asp Asp Arg Leu Ser Gln Thr Lys Arg Val Lys Ser Asn
1 5 10 15

Arg Arg

<210> 46
<211> 18
<212> PRT
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<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<400> 46
Leu Arg Thr Asp Asp Arg Leu Ser Gln Thr Gln Arg Leu Asn Ser Asn
1 5 10 15

Ala Arg

<210> 47
<211> 18
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<220>
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peptide

<400> 47
Leu Arg Thr Asp Asp Arg Leu Ser Gln Thr Arg Arg Leu Arg Ser Asn
1 5 10 15

Gly Arg

<210> 48
<211> 18
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<400> 48

Leu Arg Ala Asp Asp Arg Leu Ser Gln Thr Lys Arg Met Arg Ser Asn
1 5 10 15

Met Arg

<210> 49

<211> 18

<212> PRT

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<400> 49

Leu Arg Ala Asp Asp Arg Leu Arg Gln Thr Lys Arg Leu Arg Ala Asn
1 5 10 15

Leu Arg

<210> 50

<211> 18

<212> PRT

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<400> 50

Leu Arg Ala Asp Asp Arg Leu Ala Gln Thr Lys Arg Ile Gly Ser Asn
1 5 10 15

Thr Arg

<210> 51

<211> 18

<212> PRT

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<400> 51

Leu Arg Thr Asp Asp Arg Leu Ser Gln Thr Asn Arg Leu Gln Gly Asn

1 5 10 15

Lys Arg

<210> 52
<211> 18
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<220>
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peptide

<400> 52
Leu Arg Ala Asp Asp Arg Leu Arg Gln Thr Lys Arg Leu Arg Ala Asn
1 5 10 15

Leu Arg

<210> 53
<211> 18
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peptide

<400> 53
Asn Asn Ala Met Val Arg Leu Ser Gln Thr Gln Arg Met Gln Gly Asn
1 5 10 15

Ser Arg